

WHAT IS CLAIMED IS:

1. A package structure of an image sensor for electrically connecting to a printed circuit board, comprising:

5 a transparent layer on which a plurality of signal input terminals and signal output terminals are formed, the signal output terminals being used for electrically connecting the transparent layer to the printed circuit board; and

10 an image sensing chip on which a plurality of electrical circuits are formed, each of the electrical circuits being formed with bonding pads and being electrically connected to the transparent layer by way of flip chip bonding, wherein the bonding pads are electrically connected to the signal input terminals of the transparent layer, and the image sensing chip receives image signals via the transparent layer, converts the image signals into electrical signals, and transmits the electrical signals from the signal output terminals of the transparent layer to the printed circuit board.

15 2. The package structure of an image sensor according to claim 1, wherein the transparent layer is a transparent glass.

3. The package structure of an image sensor according to claim 1, wherein the transparent layer comprises a first surface formed with the signal input terminals, and a second surface opposite to the first surface and formed with the signal output terminals.

4. The package structure of an image sensor according to claim 1, wherein

the signal input terminals and the signal output terminals are formed on the transparent layer by way of wire plating.

5 5. The package structure of an image sensor according to claim 1, wherein a slot is formed in the printed circuit board, and the transparent layer is arranged in the slot of the printed circuit board so that the image signals are transmitted to the image sensing chip via the transparent layer.

6. The package structure of an image sensor according to claim 1, wherein a glue layer is provided at electrical connecting portion between the image sensing chip and the transparent layer.

10 7. The package structure of an image sensor according to claim 1, wherein after the image sensing chip is electrically connected to the transparent layer, a glue layer is provided to seal the electrical connecting portion between the image sensing chip and the transparent layer.

8. A method for packaging the image sensor, comprising the steps of:

15 providing a transparent layer formed with signal input terminals and signal output terminals; and

providing an image sensing chip on which a plurality of electrical circuits are formed, each of the electrical circuits being formed with bonding pads and being electrically connected to the transparent layer by way of flip chip bonding,
20 wherein the bonding pads are electrically connected to the signal input terminals of the transparent layer, and the image sensing chip receives image signals via the

transparent layer, converts the image signals into electrical signals, and transmits the electrical signals from the signal output terminals of the transparent layer to the printed circuit board.

9. The method for packaging the image sensor according to claim 8,
5 wherein the transparent layer is a transparent glass.

10. The method for packaging the image sensor according to claim 8,
wherein the transparent layer comprises a first surface formed with the signal
input terminals, and a second surface opposite to the first surface and formed with
the signal output terminals.

11. The method for packaging the image sensor according to claim 8,
10 wherein the signal input terminals and the signal output terminals are formed on
the transparent layer by way of wire plating.

12. The method for packaging the image sensor according to claim 8,
wherein the signal output terminals of the transparent layer are used for
15 electrically connecting the transparent layer to the printed circuit board.

13. The method for packaging the image sensor according to claim 12,
wherein a slot is formed in the printed circuit board, and the transparent layer is
arranged in the slot of the printed circuit board so that the image signals are
transmitted to the image sensing chip via the transparent layer.

20 14. The method for packaging the image sensor according to claim 8,
wherein a glue layer is provided at an electrical connecting portion between the

image sensing chip and the transparent layer.

15. The method for packaging the image sensor according to claim 8, wherein after the image sensing chip is electrically connected to the transparent layer, a glue layer is provided to seal the electrical connecting portion between the
- 5 image sensing chip and the transparent layer.